

**UNITED STATES DEPARTMENT OF COMMERCE****Patent and Trademark Office**

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SB

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/576,731	05/23/00	BAUMAN	W DP-300043

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EXAMINER

COMPTON, E

ART UNIT

PAPER NUMBER

3726

DATE MAILED:

08/24/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademark

Office Action Summary	Application No. 09/576,731	Applicant(s) Bauman et al
	Examiner Eric Compton	Art Unit 3726

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on _____

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle* 1035 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-11 is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-11 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are objected to by the Examiner.

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) All b) Some* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) Notice of References Cited (PTO-892) 18) Interview Summary (PTO-413) Paper No(s). _____

16) Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) Notice of Informal Patent Application (PTO-152)

17) Information Disclosure Statement(s) (PTO-1449) Paper No(s). 4 20) Other: _____

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DETAILED ACTION

Drawings

1. Figure 1 (left figure) should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).
2. The drawings are objected to because there are two Figure 1s. The Figure , on the right, should read --Figure 2-- Correction is required.

Specification

3. The disclosure is objected to because of the following informalities: on page 3, line 22; and page 8, line 14, there appears to be a font (or typographical) error regarding the temperature units, i.e., "EF" should read --°F--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
5. Claims 1-11 are rejected under 35 U.S.C. 112, first paragraph, because the best mode contemplated by the inventor has not been disclosed. Evidence of concealment of the best mode

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is based upon the fact while the specification notes that this process can be used for forming steel roller bearings there is no explanation as to how this is implemented for a forming a roller element. Roller bearings may comprise one or more of the following elements: inner/outer races, roller elements, e.g., balls, rollers, or cages (or other roller element separation means). These elements may have physically different structures, may comprise different materials, and may be formed by entirely different processes. Therefore, based on the specification alone it is not clear as to how or what type of bearing elements Applicants intend to form by the claimed method.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9, line 3, references itself.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who

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has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

9. Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 6,019,517 to Katsuki et al.

Katsuki et al disclose a method of forming inner (14) and outer bearing (1) races for a roller bearing. The method comprises obtaining a hardened metal cylindrical blank, by cold-working, having end face surfaces, a lateral surface (4,17) defining an outer diameter, and a centered circular bore, said bore having an inner surface (2a,19) defining an inner diameter; and turning the inner surface of the bore to a specific inner diameter; and turning the lateral surface of the blank to specific outer diameter. See Figures 1-5 and supporting text in the specification for more details.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 3-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katsuki et al in view of Applicants' Admitted Prior Art (AAPA).

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Katsuki et al disclose the invention cited above. However, they do not disclose the particulars claimed by Applicants.

AAPA, as found on pages 1-6 of the specification, discloses a prior art process for forming a metal roller bearing comprising forming a steel blank by either warm forging, hot forging, cold forging, and machining.

Regarding claim 3, it would have been obvious to one having ordinary skill in the art at the time the invention was made, to provide the method of Katsuki et al with a steel blank formed by either forging or machining, in light of the teachings of AAPA, in order to form the blank to conventional means.

Regarding claim 4, AAPA notes that heat treating of the blank prior to finishing is known (see page 8, lines 11-15).

Regarding claims 5-6, AAPA disclosed that it is known to forge the blank. Therefore, a flash piece is formed that must be subsequently removed. The prior art teaches grinding finish the inner surface of the bore. This operation inherently will remove the flash. Katsuki et al teach turning the inner surface of the bore rather than grinding. Therefore, turning the inner surface of the bore as taught by Katsuki et al will remove the flash just as the prior art grinding operation did.

Regarding claim 7, Official Notice is taken that diamond honing machinery is known in the art.

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Regarding claim 8, AAPA notes that forming an incised cross-hatched pattern on the inner surface of the bore is known (see page 2, lines 18-20).

Regarding claim 9, Official Notice is taken that the use of computer numerically controlled (CNC) lathes is well known in the art of manufacturing. Furthermore, Official Notice is also taken that cubic boron nitride or ceramic cutting coated tools are well known in the machining arts to extend the life of the tool.

Regarding claims 10-11, the specification notes that, “The steps of hard turning of the surface of the bore and the lateral surface of the blank can be carried out in either order ...” (page 9, line 15-16). Therefore, it would have been obvious to a skilled artisan to perform these steps in either order since it has no affect the implementation of the invention.

Prior Art References

12. The prior art references listed on the enclosed PTO-892, but not used in a rejection of the claims, are cited for their teachings of forming a roller bearing.

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Contact Information

13. Official documents related to the instant application may be submitted to the Technology Center 3700 mail center by facsimile at (703) 305-3579/3580. Should Applicant desire to submit a DRAFT response to the Examiner by facsimile transmission, then Applicant should contact the Examiner at the number below for instructions concerning the transmission of DRAFT documents. Applicant is reminded to clearly mark any facsimile transmission as "DRAFT" if it is not to be considered as an official response.

14. Any inquiry concerning this communication should be directed to Examiner Eric Compton at telephone number (703) 305-0240.



S. THOMAS HUGHES
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700

ebc 
August 16, 2001

Attachment for PTO-948 (Rev. 03/01, or earlier)
6/18/01

The below text replaces the pre-printed text under the heading, "Information on How to Effect Drawing Changes," on the back of the PTO-948 (Rev. 03/01, or earlier) form.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

1. Correction of Informalities -- 37 CFR 1.85

New corrected drawings must be filed with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the Notice of Allowability. Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136(a) or (b) for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

Timing of Corrections

Applicant is required to submit the drawing corrections within the time period set in the attached Office communication. See 37 CFR 1.85(a).

Failure to take corrective action within the set period will result in **ABANDONMENT** of the application.